

Harvest of the Month

Network for a Healthy California



Nutrition Facts

Serving Size: ½ cup cantaloupe, cubed (80g)

Calories 27

Calories from Fat 1

% Daily Value

Total Fat 0g 0%

Saturated Fat 0g 0%

Trans Fat 0g

Cholesterol 0mg 0%

Sodium 13mg 1%

Total Carbohydrate 7g 2%

Dietary Fiber 1g 3%

Sugars 6g

Protein 1g

Vitamin A 54% Vitamin C 49% Calcium 1% Iron 1%

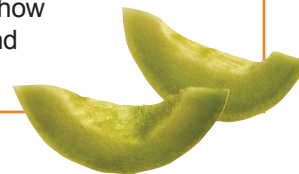
Source: www.nutritiondata.com

For nutrition information in bar graph format, visit the *Educators' Corner* at www.harvestofthemonth.com.

MELONS
July

Health and Learning Success Go Hand-in-Hand

Farmers' markets can help students learn how food travels from the farm to the plate. They also showcase California's diversity of fresh fruits and vegetables. Studies have shown that increasing students' knowledge of fruits and vegetables may result in increased consumption. Use **Harvest of the Month** to teach students about California's farmers' markets and show them how to lead a healthy, active lifestyle. It links with core curricula and connects the classroom, cafeteria, home and community.



Exploring California Melons

Offering activities that allow students to experience melons using their senses engages them in the learning process and creates increased interest, awareness and support for eating more fruits and vegetables.

Tools:

- Three or more different varieties of melons*
- Knives, cutting boards and serving plates (one for each group)
- Plastic food service gloves (one pair per student)
- Small plates or bowls
- Paper and pencils

*Refer to *Eat Your Colors* on page 2 for varieties.

Sensory Exploration Activity:*

- Divide class into student groups; distribute one melon variety to each group
- Observe the external look, feel and smell of melon; record observations
- Cut open fruit and note color and smell of inside; record observations
- Scoop out seeds and cube fruit; place on serving plate at head table
- Sample each melon variety; record taste differences and similarities among melons
- Share observations with class; make a graph showing the classroom favorite

Optional: Have class write letter to school food service staff letting them know about favorite melon variety and request to feature it more often on school menus.

*Consider conducting activity with *Adventurous Activities* on page 4.

For more ideas, reference:

Botany on Your Plate, University of California Botanical Garden, The Regents of the University of California, 2005.

How Much Do I Need?

A serving of melons is one-half cup cubed melon. This is about the size of one cupped handful. Remind students to eat a variety of colorful fruits and vegetables throughout the day to reach their total daily needs.

Recommended Daily Amounts of Fruits and Vegetables*

Kids, Ages 5-12	Teens, Ages 13-18	Adults, 19+
2½ - 5 cups per day	3½ - 6½ cups per day	3½ - 6½ cups per day

*Ranges take into account three activity levels: sedentary, moderately active and active. For example, active individuals should aim to eat the higher number of cups per day. Visit www.mypyramid.gov to learn more.

Cooking in Class: Rainbow Melons

Ingredients:

Makes 35 tastes at ⅓ cup each

- 4 cups watermelon balls or cubes
- 4 cups cantaloupe balls or cubes
- 4 cups honeydew melon balls or cubes
- Small plates and napkins

Use a melon baller to scoop melons. Serve taste of each melon variety.

For more ideas, visit:

www.cachampionsforchange.net



July Events

- National Peach Month
- Independence Day
- Therapeutic Recreation Week

Reasons to Eat Melons

Cantaloupe

Serving Size: ½ cup, cubed (80g)	
Calories 27	Calories from Fat 1
% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 13mg	1%
Total Carbohydrate 7g	2%
Dietary Fiber 1g	3%
Sugars 6g	
Protein 1g	
Vitamin A 54%	Calcium 1%
Vitamin C 49%	Iron 1%

Casaba Melon

Serving Size: ½ cup, cubed (85g)	
Calories 24	Calories from Fat 1
% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 8mg	0%
Total Carbohydrate 6g	2%
Dietary Fiber 1g	3%
Sugars 5g	
Protein 1g	
Vitamin A 0%	Calcium 1%
Vitamin C 31%	Iron 2%

Honeydew Melon

Serving Size: ½ cup, cubed (88g)	
Calories 32	Calories from Fat 1
% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 16mg	1%
Total Carbohydrate 8g	3%
Dietary Fiber 1g	3%
Sugars 5g	
Protein 0g	
Vitamin A 1%	Calcium 1%
Vitamin C 27%	Iron 1%

Watermelon

Serving Size: ½ cup, cubed (78g)	
Calories 23	Calories from Fat 1
% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 1mg	0%
Total Carbohydrate 6g	2%
Dietary Fiber 0g	1%
Sugars 5g	
Protein 0g	
Vitamin A 9%	Calcium 1%
Vitamin C 10%	Iron 1%

Source: www.nutritiondata.com

One serving of melons may provide:

- An excellent source of Vitamin C (e.g., cantaloupe, casaba, honeydew).
- An excellent source of Vitamin A (e.g., cantaloupe).
- A source of potassium (e.g., cantaloupe, casaba, honeydew, watermelon).
- A source of Vitamin B6, folate and niacin (e.g., cantaloupe, casaba, honeydew).
- A source of lycopene (e.g., watermelon).

Potassium is an essential mineral that functions primarily in the intracellular fluid by regulating electrolyte and water balance and cell metabolism. It also plays a role in the synthesis of muscle protein from amino acids in the blood.

Eat Your Colors

Fruits and vegetables come in a rainbow of colors. Eat a variety of colorful fruits and vegetables every day — red, yellow/orange, white, green and blue/purple. These may lower the risk of some cancers. Melons are found in the red, yellow/orange and green color groups.

Color Group	Health Benefits	Melon Examples
Red	Help maintain heart health, memory function and urinary tract health	Watermelon
Yellow/Orange	Help maintain heart health, vision health and healthy immune system	Cantaloupe, casaba, piel de sapo, sugar melon, yellow watermelon
Green	Help maintain vision health and strong bones and teeth	Honeydew, Crenshaw, horned melon, galia

For more information, visit:
www.fruitsandveggiesmatter.gov

Just the Facts

- On average, it takes about 10 to 15 bee visits for proper pollination to grow melons.
- By weight, the watermelon is the most common melon consumed in America, followed by the cantaloupe and honeydew melon.
- There are many varieties of the “western shipping type” cantaloupe, but since consumers cannot differentiate between them, they are marketed under the general name as “cantaloupe.”
- There are four main varieties of watermelon: allsweet, ice-box, seedless and yellow flesh.

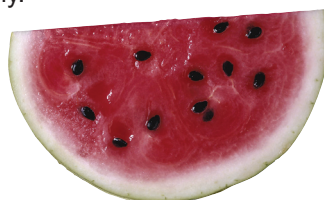
Sources:

www.fruitsandveggiesmatter.gov/month/watermelon.html
<http://anrcatalog.ucdavis.edu/pdf/7218.pdf>

Student Sleuths

- 1 Study the Nutrition Facts labels for cantaloupe, casaba and honeydew melons. Make a list of nutrients found in each variety and write a brief sentence about the health benefits each provides to the body. Compare and contrast the nutrients for each melon. Refer to the Nutrition Facts label for watermelon. How does it compare to other melon varieties?
- 2 Melons are members of the gourd family. Make a list of other produce items that belong to this family. Is the melon a fruit or vegetable? Write a persuasive argument for your statement.
- 3 Cantaloupes were named after the Roman town of Cantalupo in Italy where they were grown in abundance. Locate this on a map and research how the ancient Romans used cantaloupes. Study how the melon has been used in other parts of the world. Sample different melon varieties with your family.

For information, visit:
www.nutritiondata.com
www.plants.usda.gov



School Garden: Bug Hunt

Tools:

- Light-colored cloth sheet
- Magnified bug boxes or hand lenses

Activity:

- Take sheet and place under plant bush or shrub.
- Shake plant gently and carefully remove sheet.
- Use magnified bug boxes to observe bugs found on sheet; record observations.
 - **Grades K–6:** Draw and label the basic insect parts (e.g., head, thorax, abdomen).
 - **Grades 7–12:** Identify and classify insects; conduct population surveys; and/or study predator-prey relations in insect world.
- Shake sheet over plant to return bugs to their home.
- Repeat with different plant. Compare types of bugs found.

Adapted from: www.lifelab.org

For information, visit:

www.ipm.ucdavis.edu
www.csgn.org/curriculum.php

Cafeteria Connections

Celebrate the many varieties of melons by hosting a “Melon Contest.”

- Find as many different varieties as possible at local grocery store or farmers’ market.*
- Set-up display of melon varieties in cafeteria.
- Decide on contest (e.g., name the varieties; identify the flesh color; estimate the number of seeds in each melon; estimate the circumference of each melon; estimate weight).
- Feature melon varieties on menu throughout month to promote contest.

*Refer to *What’s in a Name?* on page 4 for different melon varieties.

Adapted from: Team Nutrition “Food Works,” 1995.

Home Grown Facts

- California leads the nation in both cantaloupe and honeydew production — producing more than 70% of the nation’s crop — and ranks fourth in watermelon production.
- The combined total value of the State’s cantaloupe, honeydew and watermelon crops exceeds \$217 million.
- Melons rank in the top 30 among California’s commodity exports at a value of about \$40 million.
- The cantaloupe is the predominant variety grown — accounting for more than half of all California grown melons.
- Fresno county is the leading producer of cantaloupes.
- The major growing regions for melons include the Central Valley (Sacramento, Stanislaus, Kern, Fresno, Kings, Merced and Tulare counties); and the southern desert valley (Imperial and Riverside counties).

2005 Data

For more information, visit:

<http://anrcatalog.ucdavis.edu/pdf/7218.pdf>
www.nass.usda.gov/About_NASS/index.asp

A Slice of Melon History

- Melons were first cultivated in Persia and northern Africa nearly 4,000 years ago, and later by ancient Greeks and Romans.
- Introduced to western and northern Europe during the Middle Ages, melons were harvested by the Spaniards and later the French and British.
- Christopher Columbus brought over the first melon seeds to North America on his second expedition, while watermelons arrived with African slaves.
- In 1683, the melon was introduced to California by Spanish missionaries.
- Melons and watermelons were grown almost exclusively in home gardens until the first half of the 20th century, when more disease- and wilt-resistant cultivars were developed by the USDA.

For a more detailed outline, visit:

www.harvestofthemonth.com

How Do Melons Grow?

Melons are a warm-weather annual plant sensitive to cold temperatures at any stage of growth. In fact, seeded melons germinate best under hotter temperatures, up to 95 F, and can tolerate temperatures in excess of 100 F. In California, melons go to market beginning in May with a continuous supply through October, peaking in July and August.

Melons grow best when planted on raised beds spaced every 12 inches, in rows spaced four to six feet apart. Due to their large size, melons are normally hand-harvested when ripe at the “full-slip” stage, when the fruit easily separates from the vine with slight pressure.

Soil	Loam or clay-loam; well-drained
Optimal Temperature	85 to 95 F
Exposure	Full sun
Irrigation	Minimal; keep tops of bed dry to minimize fruit contact with moist soil
Reproduction	Bee pollination
Days to harvest	75 to 100

For more information, visit:

www.cfaitc.org/GardenGuide/
<http://anrcatalog.ucdavis.edu/pdf/7218.pdf>

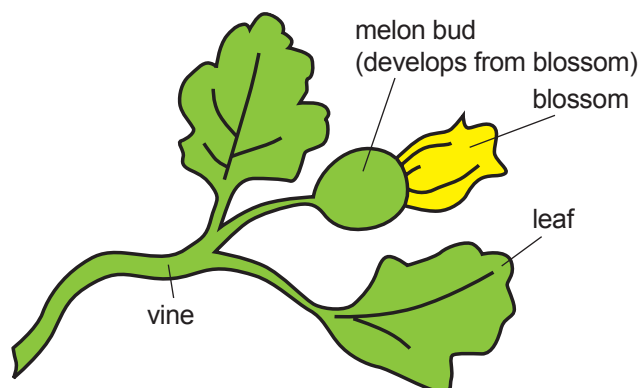


Image adapted from:

http://district.ausd.net/docs/harvest_watermelon_september_2005.pdf

To download reproducible botanical images, visit the Educators’ Corner at www.harvestofthemonth.com.



Student Advocates

Support local growers and California agriculture by promoting farmers' markets.

- Introduce yourself to the local growers and ask if you can help promote sales.
- Make a schedule of farmers' markets in your area. If none are nearby, find out how to get one in your neighborhood.
- Develop a promotional flyer inviting students, friends and families to visit these markets.
- Distribute flyers on school campus and local neighbors.
- Increase attendance by hosting a contest or arranging a neighborhood walk to and from the market.

For information, visit:
www.localharvest.org

What's in a Name?

Pronunciation: mēl'ən
Spanish name: melón
Family: Cucurbitaceae
Genus: *Cucumis*
Species: *C. melo*

Melons are vine-like herb plants of the Cucurbit family that bear an accessory fruit known as a false berry. The fruit is actually called *muskmelon* because of its odor when ripe, but over the years this has been shortened to *melon*.

The watermelon also belongs to the Cucurbit family, but is classified in the genus *Citrullus*. Therefore, it is only loosely considered a type of melon. There are numerous melon cultivars, but commercially the most common are the cantaloupe (Cantalupensis and Reticulatus Groups) and the honeydew (Inodorus Group).

Major Melon Cultivar Group	Characteristics	Includes
Cantalupensis	Rough and warty skin; grown only in Europe and South Africa	European cantaloupe
Inodorus	Smooth rind; subtle and sweet flavor	Honeydew, Crenshaw, casaba, winter melon, American melon, Oriental sweet melon
Reticulatus	Netted skin with musky odor	Netted melon, North American cantaloupe

For more information, visit:
www.hort.purdue.edu/



Adventurous Activities

Hint: Coordinate with *Exploring California Melons* activity on page 1.

Melon Math:

- Estimate the weight of each melon variety; measure weight and record.
- Estimate the circumference, surface area and volume of each variety; measure and record.
- Compare weight and size measurements for each variety. Determine if there is a correlation between weight and size. Why or why not?
- Determine the edible portion of each melon variety and weigh, if possible.
- Compare the ratio of fruit to rind for each melon variety.
- Estimate and record number of seeds in each variety. Determine which variety has the most number of seeds.

For more ideas, visit:
www.harvestofthemoonth.com

Literature Links

- **Elementary:** *Anansi and the Talking Melon* by Eric Kimmel, *Melvin's Melons* by Sherry Vaughn, *A Seed Grows* by Pamela Hickman and Heather Collins and *Watermelon Day* by Kathi Appelt.
- **Secondary:** *Encyclopedia of Foods* by Inc. Experts from the Dole Food Company, The Mayo Clinic, UCLA Center for Human Nutrition [Editor], *Genetically Modified Food* by Nigel Hawkes and *Melons for the Passionate Grower* by Amy Goldman.

For more ideas, visit:
www.cfaitc.org/Bookshelf/Bookshelf.php

Physical Activity Corner

Physical education (PE) experiences provide students with a unique opportunity for problem solving, self-expression, socialization and conflict resolution. Research has shown that students who engage in daily PE have superior motor fitness, academic performance and a better attitude toward schools than their peers who do not. If your students cannot engage in PE every school day, remind them to be physically active for at least one hour every day before, during or after school. Work with your school's PE teachers to find an activity that you can implement on days when your students do not have PE.

For activity ideas, visit:
www.afterschoolpa.com

Next Month: Potatoes

